

# BASIC TRANSMUTATION/ALIEN MIGRATION

SINTIÓ SEÑAS EN LOS DEDOS DE AMBAS MANOS. ARRANCÓ LA PLANTA Y LA TRAJÓ ENVUELTA EN UNAS HOJITAS.

GUAMBIANOS: HIJOS DEL AROIRIS Y DEL AGUA  
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(1) GUAMBIANOS: HIJOS DEL AROIRIS Y DEL AGUA  
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ÁNGEL ESCOBAR/FONDO DE PROMOCIÓN DE LA CULTURA DEL BANCO POPU-  
LAR, COLECCIÓN HISTORIA Y TRADICIÓN GUAMBIANAS, NUMERO 5, BOGOTÁ,  
1998.

“NEOBIOTA AS NON-NATIVE SPECIES ARE COMMONLY CONSIDERED AS **ALIEN SPECIES**. THE CONVENTION ON BIOLOGICAL DIVERSITY (CBD) URGES ITS MEMBER STATES IN ARTICLE 8 (H) TO “PREVENT THE INTRODUCTION OF, CONTROL OR ERADICATE THOSE ALIEN SPECIES WHICH THREATEN ECOSYSTEMS, HABITATS OR SPECIES” (CBD 1992). (...) EXAMPLES OF FAUNAL EXTINCTIONS OF ENDEMIC SPECIES BY NEOZOA HAVE BEEN DESCRIBED ON ISLANDS OR ISLAND LIKE ECOSYSTEMS SUCH AS LAKES, BUT A PRINCIPAL REASON OF EXTINCTION BY INTRODUCED PLANTS IS RATHER DOUBTFUL (SAGOFF 2005, 2009). THERE IS NO KNOWN CASE FOR CENTRAL EUROPE, WHEN A NON-NATIVE SPECIES HAS CAUSED THE DYING OUT OF A NATIVE SPECIES (KLINGENSTEIN ET AL. 2003; KOWARIK 2003). ON THE OTHER HAND, NEOBIOTA CAN BE CONSIDERED AS RARE AND ENDANGERED THEMSELVES, IF THEY ARE CURRENTLY ESTABLISHED OR IF THEY WERE ONCE. NATURALIZATION IS COMBINED WITH A PROCESS OF SELECTION AND ADAPTATION TO **neobiota**. IT IS JUST A QUESTION OF TIME UP TO GEOLOGICAL TIME SCALES UNTIL NEOBIOTA WILL HAVE BECOME AN INTEGRATED PART OF ECOSYSTEMS (COX 2004). (...) HOWEVER, THE EXTENT OF THESE EXPECTED CLIMATE CHANGE AND OTHER HUMAN INDUCED SPECIES NICHE/DISTRIBUTION INFLUENCES CANNOT BE PREDICTED PRECISELY BY MODELING, FOR INSTANCE, CLIMATE ENVELOPES (THOMAS AND OHLEMÜLLER 2010 ) DUE TO THE COMPLEXITY AND UNPREDICTABILITY OF FUTURE CHANGES AND EVOLUTIONARY INTERACTIONS (LAVERGNE ET AL. 2010)”

EU DAISIE RESEARCH PROJECT: WANTED—DEATH  
PENALTY TO KEEP NATIVE SPECIES COMPETITIVE?  
M. ZISENIS

# **“NATURE’S HEALTH/WEELLBEING IS A COLLECTIVE CONCERN/MATTER, TRANS-SPECIES AND CYBORG.**

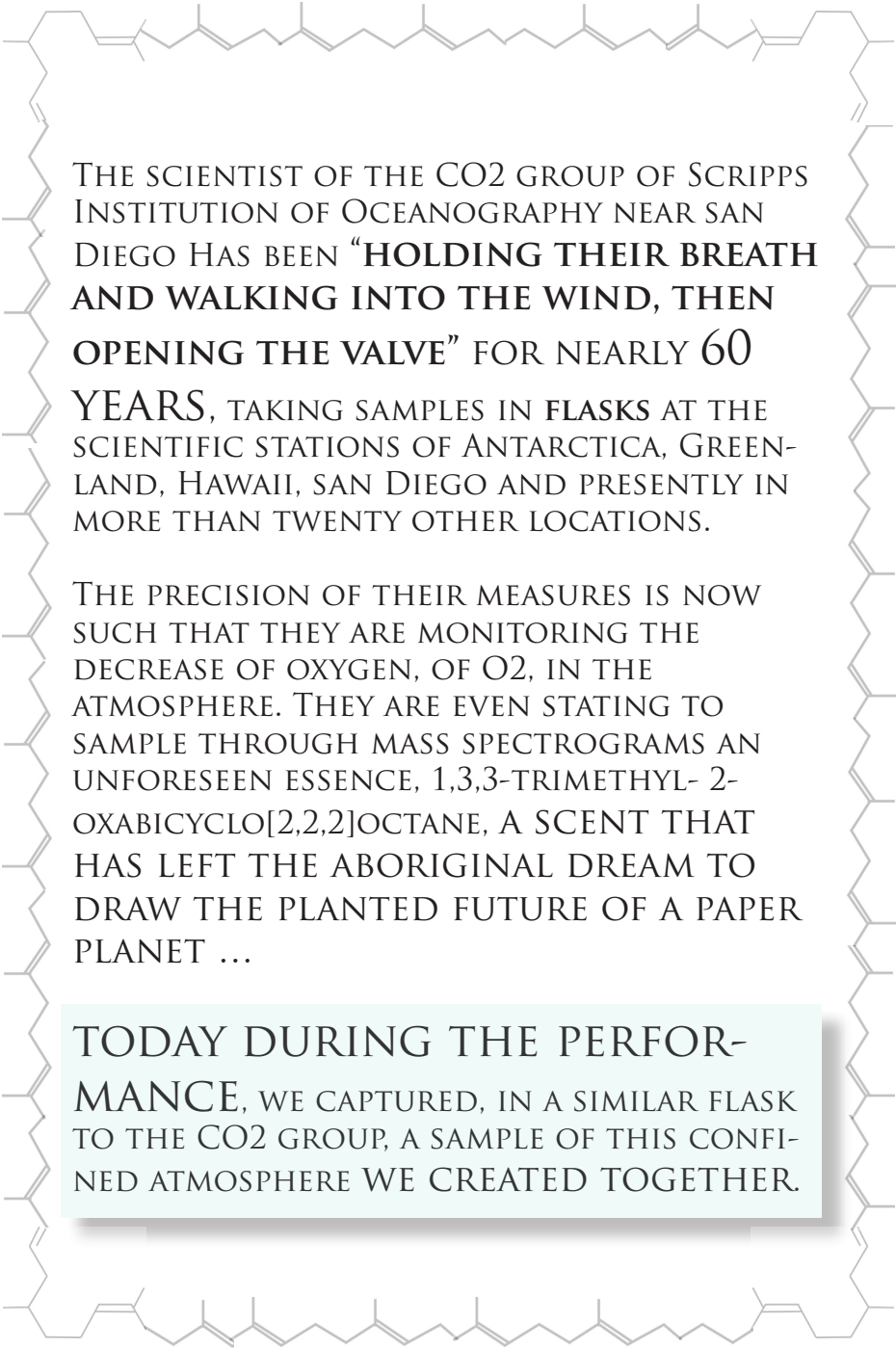
This is how we consider an ecology that becomes cosmos where everything crumbles, we’re already in dystopia. We start from our bodies to bastardize/multimorph ourselves in strong alliance with the neglected:

**PLANTS:  
THE NEGLECTED FROM BIOLOGY.**

**FEMININ AND BIZARRE BODIES:  
THE NEGLECTED FROM ANATOMY.**

**OBSOLETE AND LOW TECHNOLOGIES:  
THE NEGLECTED FROM MALLS.**

**WITCHES, CHAMANS, ALCHEMISTS:  
THE NEGLECTED FROM SCIENCE.**



THE SCIENTIST OF THE CO<sub>2</sub> GROUP OF SCRIPPS INSTITUTION OF OCEANOGRAPHY NEAR SAN DIEGO HAS BEEN **“HOLDING THEIR BREATH AND WALKING INTO THE WIND, THEN OPENING THE VALVE”** FOR NEARLY **60 YEARS**, TAKING SAMPLES IN **FLASKS** AT THE SCIENTIFIC STATIONS OF ANTARCTICA, GREENLAND, HAWAII, SAN DIEGO AND PRESENTLY IN MORE THAN TWENTY OTHER LOCATIONS.

THE PRECISION OF THEIR MEASURES IS NOW SUCH THAT THEY ARE MONITORING THE DECREASE OF OXYGEN, OF O<sub>2</sub>, IN THE ATMOSPHERE. THEY ARE EVEN STATING TO SAMPLE THROUGH MASS SPECTROGRAMS AN UNFORESEEN ESSENCE, 1,3,3-TRIMETHYL- 2-OXABICYCLO[2,2,2]OCTANE, A SCENT THAT HAS LEFT THE ABORIGINAL DREAM TO DRAW THE PLANTED FUTURE OF A PAPER PLANET ...

**TODAY DURING THE PERFOR-**  
**MANCE**, WE CAPTURED, IN A SIMILAR FLASK TO THE CO<sub>2</sub> GROUP, A SAMPLE OF THIS CONFINED ATMOSPHERE WE CREATED TOGETHER.

## OFFENSE

I REMEMBER THE DAY  
THE FALLING LIGHT  
THE FADING RAIN

I REMEMBER THE PRESSURE OF THE SUN  
SENDING BLASTS OF SUGAR IN MY VEINS

I  
FEEL THE ECHO OF GREEN ON MY LEAVES  
FRIEND  
ENEMY  
LETS FACE THE BURNING ROCKS  
FORM THE ARMED FENCE  
I WAS A PLANT  
DEEP INTO THE GROUND  
SEEKING THE DRIPPING SILENCE  
THE STREAM THROUGH THE SAND

I  
THE WIND TO SEED THE SKY

REMEMBER  
THE WORDS  
THE CRIES  
THE TREMBLES  
THE TRIES TO DEFEAT THE HEIGHT

AND THEN  
THE DAY TOO BRIGHT  
THE NIGHT WHEN FELL THE STARS

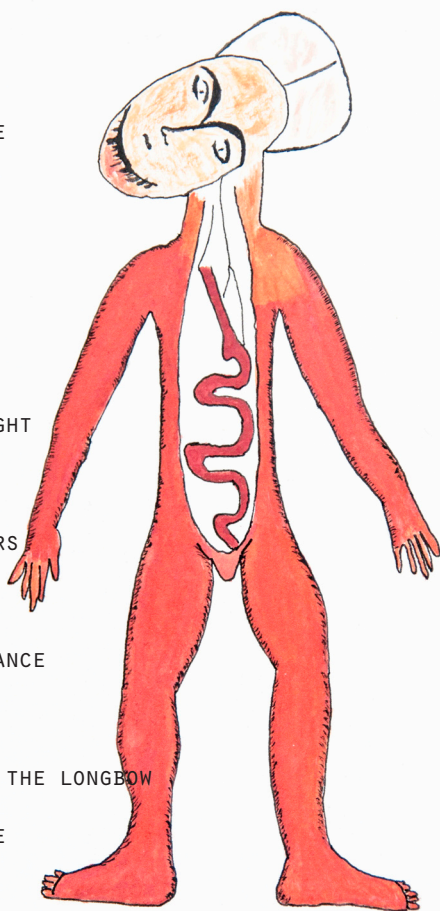
I WAS A FRAGRANCE  
A BUMBLE TRANCE  
A WHISPER IN THE MUMBLING DANCE

A PLANT

I REMEMBER THE SLOW BEND OF THE LONGBOW  
THE CRACK THROUGH THE AIR  
THE SENTENCE OF THE IRON AXE

THE SAP STRIKING THE HEART

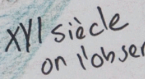
I REMEMBER I WAS



Copied drawing from an anatomical  
medieval Armenian manuscript



2012 300k = 600 €  
Vol d'Eucalyptus  
dans le Var.



1788



1788 Eglise Eucalyf  
par L'Heritier de  
Bouffelle





# Teinture Mère d'eucalyptus par percolation (Selon plusieurs sources web)

Partie utilisée: Feuille

Propriétés:

- Astringente
- Balsamique
- Tonique
- Fébrifuge
- Antiseptique

Indications:

- Affections de la sphère ORL
- Etat fébrile

200g de feuilles d'eucalyptus sèches, 1L d'alcool à 80°

1. Couper la plante le plus finement possible. Pour certaines parties ligneuses ou plus coriaces, découper d'abord en petits tronçons, puis broyer plus finement avec un mixer, voire un moulin à café.

2. Pour que la poudre devienne du marc, il faut l'humidifier à raison de deux tiers de volume d'alcool pour un volume de poudre. Par exemple, 300 g de poudre représentent l'équivalent de 400 ml; il faut donc humidifier avec 260 ml d'alcool environ.

3. Pour vérifier que votre marc a la bonne texture, prenez-en un peu dans votre main. S'il n'est pas assez humide, il ne se compactera pas et la boule prélevée s'effritera. S'il est trop humide, il rendra l'alcool comme une éponge: ce sera de la macération et non pas de la percolation. L'opération sera donc ratée. Si vous avez réussi, il faut ensuite le laisser reposer 24 heures.

4. Dans l'entonnoir, mettez un filtre à café non blanchi, puis versez le marc à l'intérieur. Ensuite, découpez un cercle du diamètre de votre bouteille dans un autre filtre non blanchi, que vous placerez au-dessus du marc.

5. il vous faudra y verser de l'alcool à raison d'un demi-litre pour 100 grammes de votre poudre initiale. Faites en sorte que le niveau d'alcool reste entre 2 et 4 cm d'épaisseur au-dessus de votre filtre circulaire. Ce, afin que le marc ne se creuse pas, par trop de différence d'humidité. Le secret consiste à garder une certaine constance lors de ce processus.

6. Une fois la totalité de l'alcool versé, votre teinture mère est prête.





"HOLD YOUR BREATH AND WALK INTO THE WIND, THEN OPEN THE VALVE."\*

ABOUT EVERY TWO WEEKS, WHEN THE WINDS ARE RIGHT, SOMEONE FROM THE CO<sub>2</sub> GROUP WALKS TO THE END OF SCRIPPS PIER AND FILLS THESE STRANGE BOTTLES WITH AIR. THIS TIME- AND LABOR-INTENSIVE PROCESS TAKES PLACE A FEW FEET AWAY FROM WHERE HIGH-TECH, AUTOMATED CARBON DIOXIDE (CO<sub>2</sub>) SENSING INSTRUMENTS ARE INSTALLED. AMAZINGLY, THESE AIR SAMPLES ARE COLLECTED IN THE SAME MANNER, AND EVEN USING SOME OF THE SAME FLASKS, AS WHEN CHARLES DAVID "DAVE" KEELING BEGAN COLLECTING AIR SAMPLES FOR CO<sub>2</sub> ANALYSES 58 YEARS AGO. WHY DO SCIENTISTS STILL PERFORM THIS SLOW AND LABORIOUS AIR SAMPLING ROUTINE?

The **ANSWER** is that the air collected in these bottles is used to gather detailed information on carbon cycling and fossil fuel emissions by measuring not only the CO<sub>2</sub> concentration but also the relative abundance of the carbon isotopes <sup>12</sup>C, <sup>13</sup>C and <sup>14</sup>C.

Today, after extraction in the Keeling Lab, some CO<sub>2</sub> samples are shipped to the Lawrence Livermore National Laboratory, where they are analyzed for <sup>14</sup>C.

**14C IS RADIOACTIVE**, MEANING THAT IT DECAYS OVER TIME, FROM  $^{14}\text{C}$  TO  $^{14}\text{N}$ . THE HALF-LIFE OF  $^{14}\text{C}$  IS ABOUT 5,700 YEARS (MEANING HALF OF THE  $^{14}\text{C}$  IN A SAMPLE WILL HAVE DECAYED AFTER 5,700 YEARS). ATMOSPHERIC  $\text{CO}_2$  NATURALLY CONTAINS A SMALL AMOUNT OF RADIOCARBON, BECAUSE IT IS CONSTANTLY BEING PRODUCED IN THE ATMOSPHERE BY NUCLEAR REACTIONS TRIGGERED BY COSMIC RAYS. IN CONTRAST,  $\text{CO}_2$  FROM FOSSIL FUEL EMISSIONS DOESN'T CONTAIN ANY  $^{14}\text{C}$ , BECAUSE THE ORIGINAL RADIOCARBON CONTENT IN THE PLANT MATTER THAT FORMED THE FUEL HAS LONG SINCE DECAYED.

AS MORE AND MORE  $\text{CO}_2$  IS EMITTED INTO THE ATMOSPHERE FROM THE BURNING OF FOSSIL FUELS, THE AMOUNT OF  $^{14}\text{C}$  IN THE ATMOSPHERE IS DECREASED BY "DILUTION" WITH  $^{12}\text{C}$  AND  $^{13}\text{C}$ . MEASURING THE  $^{14}\text{C}$  ABUNDANCE IN THE ATMOSPHERE OVER TIME PROVIDES A MORE DETAILED PICTURE OF CARBON SOURCES AND SINKS, AND CAN BE USED TO DISTINGUISH ANTHROPOGENIC EMISSIONS FROM BIOGENIC EMISSIONS, AS ONLY ANTHROPOGENIC EMISSIONS ARE COMPLETELY FREE OF  $^{14}\text{C}$ .

EXTRAIT DE MEASUREMENT NOTES WHY SCIENTISTS STILL  
COLLECT  $\text{CO}_2$  IN FLASKS

[HTTPS://SCRIPPS.UCSD.EDU/PROGRAMS/KEELINGCURVE/2013/05/20/WHY-SCIENTISTS-STILL-COLLECT-BY](https://scripps.ucsd.edu/programs/keelingcurve/2013/05/20/why-scientists-still-collect-by-rob-monroe-co2-in-flasks/)  
ROB MONROE  $\text{CO}_2$ -IN-FLASKS/

**With: Eucalyptus Globulus**

**Basic Transmutation** is a project by **Aniara Rodado** and **Jean Marc Chomaz**.

**Plant movement analysis:** Aniara Rodado, Mathieu Rivière, Stephan Douady. (Laboratoire Matière et systèmes Complexes, CNRS-Université Paris Diderot)

**Soundscape:** Paula Velez.

**Choreography:** Aniara Rodado

**Redshift analogue augmented reality:**

Jean Marc Chomaz

**Technical director:** Olivier Henry

**Glasswork:** Jean Michel Wierniezy

**Technical assistance:** Antoine Garcia

**Administration and production:** Merryl Messaudi  
Crossed-lab et Delphine L'hulier LadHyX

**Traduction:** Julia Whittaker

**Graphic Design:** Odile Plou

**Basic transmutation** is coproduced by the Compagnie Aniara Rodado and the Laboratoire d'hydrodynamique CNRS-Ecole Polytechnique.

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